



## New Advances in Probabilistic Machine Learning and Bayesian Predictive Methods

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### Message from the Guest Editors

We are delighted to welcome you to this Special Issue of *Mathematics* focusing on “New Advances in Probabilistic Machine Learning and Bayesian Predictive Methods.” This Issue aims to showcase cutting-edge research and novel developments in the ever-evolving field of probabilistic machine learning, while highlighting the growing importance of Bayesian approaches in tackling complex, real-world problems.

In this Special Issue, we will explore a wide range of topics, including but not limited to scalable Bayesian inference algorithms, Bayesian deep learning, deep generative models, Gaussian processes, uncertainty quantification, computational methods for Bayesian inference, and Bayesian optimization. We aim to bring together a diverse array of interdisciplinary perspectives, fostering fruitful discussions and collaborations among researchers from academia and industry.

We cordially invite researchers to contribute their latest findings and insights to this Special Issue, pushing the boundaries of our understanding in this fascinating domain.





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## Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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